UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,449	03/29/2001	Jurij Beshenar	82365	6665

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EXAMINER
HAN, CLEMENCE S

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/820,449	BESHENAR ET AL.
	Examiner	Art Unit
	Clemence Han	2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _26 November 2004_.
2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1 and 4-22_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1,4-8,10,14,15 and 17-22_ is/are rejected.
7)☒ Claim(s) _9,11-13 and 16_ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some *   c)☒ None of:
        1.☒ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 1 is objected to because of the following informalities: In the previous office action, the use of "T" denoting "subscribers" were discussed. The applicant has deleted the first occurrence of "T" in the line 2, however, kept the second occurrence of "T" in the end of the line 3. Appropriate correction is required.

2.   Claim 9, 14 and 15 are objected to because of the following informalities:

Regarding to now amended claim 9, there are three occurrences of "data block" in the claim. The parent claim, claim 1, uses the term "data memory block" (see line 3). Appropriate correction is required.

Regarding to now amended claim 14, there is one occurrence of "data block" in the claim. The parent claim, claim 1, uses the term "data memory block" (see line 3). Appropriate correction is required.

Regarding to now amended claim 15, there are two occurrences of "data block" in the claim. The parent claim, claim 1, uses the term "data memory block" (see line 3). Appropriate correction is required.

Claim Rejections - 35 USC § 102

3.   The text of those sections of Title 35, U.S. Code not included in this action

can be found in a prior Office action.

4.   Claim 1, 4-8, 14, 15, 17 and 20-22 are rejected under 35 U.S.C. 102(e) as

being anticipated by Kim (US Patent 6,697,366).

Regarding to claim 1, Kim teaches a method of controlling a data

transmission memory for the transmission of data packets between subscribers in

which a chained subscriber-pointer address list 200, 210, 220 with address pointers

for addressing data memory blocks of a data memory 300 is stored for each

subscriber T in a pointer address memory, wherein each said data memory block

comprises a plurality of data memory cells (see Figure 5 ref. 300; the data memory

block pointed by 200, starting at the address of 1000, has 64 data memory cells.).

Regarding to claim 4, Kim teaches, in a reception operating mode, reception

data packets are received from various source subscribers via a reception data bus

and are stored in data memory cells of a data memory block addressed by the

subscriber-pointer address list (Column 3 Line 41-45).

Regarding to claim 5, Kim teaches, in a transmission operating mode, output

data packets are in each case read out from a data memory block and sent to an

associated destination subscriber via an output data bus (Column 3 Line 27-30).

Regarding to claim 6, Kim teaches each reception data packet contains destination information data for identifying a destination subscriber for which the reception data packet is intended (Column 2 Line 9-12).

Regarding to claim 7, Kim teaches a memory size of a data memory cell corresponds to the size of an input data packet ("frame unit" in Column 7 Line 11-12) and a memory size of a data memory block preferably corresponds to the size of an output data packet ("frame" in Column 3 Line 26-40).

Regarding to claim 8, Kim teaches a state of each chained subscriber-pointer address list is stored in a subscriber state register (Figure 6).

Regarding to claim 14, Kim teaches, in a transmission operating mode, a first data block of the destination subscriber is sent as an output data packet (Column 3 Line 26-40).

Regarding to claim 15, Kim teaches, after the first data block has been sent, the chained subscriber-pointer address list is shortened by removing a beginning address pointer, pointing to the first data block (Column 3 Line 38-40).

Regarding to claim 17, Kim teaches a data transmission memory for the transmission of data packets between subscribers with a pointer address memory for storing chained subscriber-pointer address lists 200, 210, 220, comprising pointer addresses, for each subscriber; a plurality of subscriber state registers

(Figure 6), which store the state of an associated subscriber-pointer address list; a

data memory 300 for storing data blocks which can be addressed by the pointer

addresses; and with a memory controller 500 for controlling the pointer address

memory and the data memory.

Regarding to claim 20, Kim teaches the memory controller is connected to

source subscribers via a reception data bus and to subscribers via a transmission

data bus (Column 2 Line 67 – Column 3 Line 1).

Regarding to claim 21, Kim teaches the transmission data bus and reception

data bus are bidirectional buses for bidirectional data transmission (Column 2 Line

67 – Column 3 Line 1).

Regarding to claim 22, Kim teaches the transmission data bus and reception

data bus are Ethernet buses (Column 7 Line 42-43).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claim 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kim in view of Klausmeier et al. (US Patent 6,487,202).

Regarding to claim 10, Kim teaches a method of controlling a data

transmission memory for the transmission of data packets between subscribers in

which a chained subscriber-pointer address list 200, 210, 220 with address pointers

for addressing data memory blocks of a data memory 300 is stored for each

subscriber T in a pointer address memory, wherein each said data memory block

comprises a plurality of data memory cells (see Figure 5 ref. 300; the data memory

block pointed by 200, starting at the address of 1000, has 64 data memory cells.).

Kim, however, does not teach a pointer address list of the free pointer addresses is

stored in the pointer address memory, so that the pointer address memory forms a

reproduction of the data memory. Klausmeier teaches a pointer address list of the

free pointer addresses is stored in the pointer address memory, so that the pointer

address memory forms a reproduction of the data memory (Column 9 Line 1-13).

It would have been obvious to one skilled in the art to modify Kim to have a

pointer address list of free pointer address as taught by Klausmeier in order to keep

track of blocks in the memory that are available (Column 9 Line 1-2).

Regarding to claim 19, Kim teaches a data transmission memory for the

transmission of data packets between subscribers with a pointer address memory

for storing chained subscriber-pointer address lists 200, 210, 220, comprising

pointer addresses, for each subscriber; a plurality of subscriber state registers

(Figure 6), which store the state of an associated subscriber-pointer address list; a data memory 300 for storing data blocks which can be addressed by the pointer addresses; and with a memory controller 500 for controlling the pointer address memory and the data memory. Kim, however, does not teach the pointer address memory is a SRAM. Klausmeier teaches the pointer address memory is a SRAM (Column 7 Line 9). It would have been obvious to one skilled in the art to modify Kim to use SRAM for the pointer address memory as taught by Klausmeier in order to support more connection (Column 7 Line 7-8).

7.   Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Alowersson et al. (US Patent 6,754,742).

Regarding to claim 18, Kim teaches a data transmission memory for the transmission of data packets between subscribers with a pointer address memory for storing chained subscriber-pointer address lists 200, 210, 220, comprising pointer addresses, for each subscriber; a plurality of subscriber state registers (Figure 6), which store the state of an associated subscriber-pointer address list; a data memory 300 for storing data blocks which can be addressed by the pointer addresses; and with a memory controller 500 for controlling the pointer address memory and the data memory. Kim, however, does not teach the data memory is a SRAM. Alowersson teaches the data memory is a SRAM (Column 2 Line 35). It

would have been obvious to one skilled in the art to modify Kim to use SRAM for

the data memory as taught by Alowersson in order to perform one read and one

write during one cycle of the controller (Column 2 Line 42-43).

Allowable Subject Matter

8.   Claim 9, 11-13 and 16 are objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all

of the limitations of the base claim and any intervening claims.

Response to Arguments

9.   Applicant's arguments with respect to claim 1 and 4-22 have been

considered but are moot in view of the new ground(s) of rejection.

10.   In the remark (line 14-15), the applicant mentions the newly added claim 23

which has not been included in the present amendment.

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

The following patents are cited to further show the state of the art with respect to

the invention in general.

        U.S. Patent 6,246,682 to Roy et al.
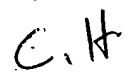
        U.S. Patent 6,622,183 to Holm

U.S. Patent 6,694,388 to Schzukin et al.

U.S. Pub. 2002/0029327 to Roth

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Clemence Han whose telephone number is

(571) 272-3158. The examiner can normally be reached on Monday-Thursday 7 -

5.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone

number for the organization where this application or proceeding is assigned is

703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. H

Clemence Han
Examiner
Art Unit 2665

STEVEN NGUY
PRIMARY EXAMIN